

EMHXD Data Acquisition Server



Description

The Leviton EMHXD is an intelligent, flexible data acquisition server allowing users to collect energy data from meters and environmental sensors through Modbus protocol. Designed to connect to IP-based applications such as enterprise energy management, demand response and smart grid programs, the EMB Hub server lets you connect thousands of energy points, benchmark energy usage and reduce energy costs. Featuring Dual Ethernet ports and Dual Modbus (RS485) ports, the EMHXD provides expanded capacity and flexibility to address a broad range of applications.

Embedded OEM Solution

The compact EMHXD footprint and industrial temperature range -22°F to 158°F (-30° to 70°C) makes this a perfect solution for embedded applications. Reduce development time and speed up integration by collecting and distributing energy information directly from your equipment.

Data Collection

The EMB Hub collects and logs data from connected (wired or wireless) devices based on user selected intervals. Data from downstream devices is time stamped and stored locally in non-volatile memory until the next scheduled upload or manual download. Using an Ethernet (LAN) connection you can push or pull data via HTTP, XML, FTP or any custom protocol utilizing our EMB Hub Module to build your own application. Dual Ethernet ports allow for separate and secure upstream connections to external networks and downstream connections to the internal device networks.

Compatibility

The EMB Hub is compatible with nearly any front-end software platform allowing customers to use a variety of reporting tools; whether it's a local server or an enterprise wide reporting suite.

Installation & Features

No software is required. Easily access information through ANY web browser. There are several additional features including alarming, SNMP Traps, network configuration, wireless diagnostics, USB, security provisions and backlit LCD. Our integrated meter driver library is designed to speed up installation and lower integration costs through plug-and-play connectivity.

Applications

- Measurement and verification (M&V)
- Tenant billing
- Reduce energy costs
- Access energy information from local or remote sites
- Benchmark building energy usage
- View "real time" performance data
- Track energy use and peak demand for Demand Response programs
- Monitor performance of critical systems (lighting, HVAC, PDUs, inverters, etc.)
- Alarm notification for data points above or below target levels (including SNMP Traps)
- Monitor renewable energy performance and production
- Push or pull meter data to energy dashboards, kiosks and software applications
- LEED / Energy Star certification

Specifications

Processor	i.MX 6UltraLite
Operating System	Linux 4.x
Memory	512 MB RAM
Flash ROM	4 GB NOR Flash
Interval Recording	1 to 60 minutes, user selectable (default 15 minutes)
LEDs	Ethernet, Modbus TX/RX, power, alarm
Console	128 x 64 pixel LCD with 5 button interface

Power

Power Supply*	24VDC, 500mA *This unit is to be sourced by a Class 2 power supply with the following output: 24VDC, 500mA min not to exceed 8A
Isolation	RJ45 Ethernet and RS-485 port are isolated to 1500VDC from the main board (Power and USB non-isolated)

Communication

Protocols	Modbus/RTU, Modbus/TCP, TCP/IP, PPP, HTTP/HTML, FTP, NTP, XML, SNMP-Trap
LAN	Two RJ45 10/100 Ethernet, full half duplex, auto polarity
USB	USB expansion port
Security	SSL/TLS

Inputs

Serial Ports	Two RS-485 Modbus, each supporting up to 32 external devices (64 devices total)
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Physical

Weight	0.42lbs (0.19kg)
Size	4.61" W x 5.19" H x 1.9" D (117.1mm x 131.9mm x 48.3mm)

Environment

North America	-22°F to 158°F (-30°C to 70°C), 95% RH, non-condensing
Altitude	2000M max
Pollution	Degree 2

Codes & Standards

FCC CFR 47 Part 15, Class A, EN 61000, EN 61326, CE, UL61010 Recognized

Additional Notes

NEMA enclosures available upon request
Cellular modems available upon request
Manufactured in U.S.A.

Ordering Information

EMHXD

Cat. No.	Description
EMHXD-220	Energy Monitoring HUB, Dual Ethernet, Dual Modbus
YBM07-001	Power Supply

NOTE: The Power Supply is required to power the EMB Hub but is not included and must be ordered separately.

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